www.accutone.com

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Accutone®

USB500

VoIP Headset with Skype Interactive Controller

designed for skype™ software

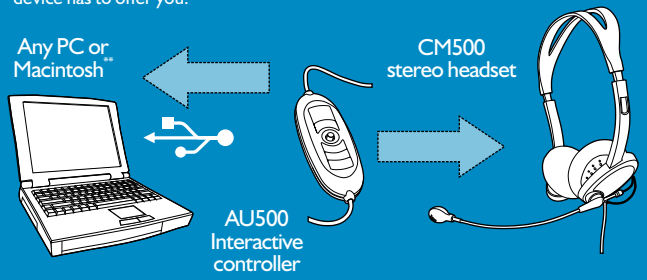
Installation Guide & User Manual

USB 500 VoIP COMMUNICATION HEADSET

direct control of your Skype software from your headset!

Thank you for purchasing the Accutone® USB500 VoIP Communication Headset. This high-performance headset is designed for professional Voice over IP communication, whether it is Skype® chat or any proprietary softwares. Although the USB500 is tailor-made for human voice applications, its 40mm custom-designed stereo speakers are more than capable of handling top notch hi-fi gaming as well as listening to music with your PC. Aside from perfect sound reception, it is also equipped with Accutone®'s noise cancelling microphone. On top of all that, we have reduced the size of the USB module, added the control interface while still fitting it into a compact and stylish casing, giving you digital audio control without compromising convenience.

Now please spend a few moments to read through this user manual before connecting the USB headset to your computer. After familiarizing with the features and functions, you will surely appreciate the top audio performance this unique device has to offer you.



** USB500 VoIP headset is compatible to both desktop and notebook computers with an USB jack. Only the operating systems listed under "Operating Environment" in the section of Specifications of AU500 USB Converter on page 2 are applicable.

*** Outside the operating environments mentioned on page 2, the adaptor is not guaranteed to operate with all computers. The adaptor is not guaranteed to operate with home built computers, operating systems that are personally up-graded or multiple operating systems. The adaptor is also not guaranteed to operate with functions under system suspend, sleep and hibernation modes.

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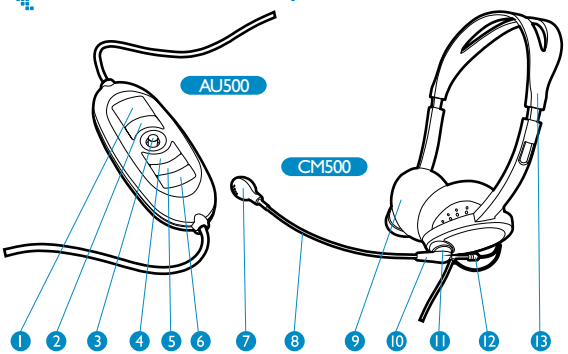
Specifications.

Stereo Headset CM500	
Cord	2m long
Mass	100 g (without cord)
Receiver	
Size	40mm diameter
Type	Open air dynamic driver unit
Voice coil	CCAW
Maximum input power	10mW/20mW
Impedance	32Ω ±15% at 1kHz, 1V
Sensitivity	93±3dB(3mW/1CM)
Frequency range	40 - 20,000 Hz
Microphone	
Design	Flexible boom microphone
Type	Electret condenser
Open circuit voltage level	-47dB (0dB=1V/Pa)
Frequency range	20 - 20,000 Hz
USB Controller AU400	
Frequency range	20 - 20,000 Hz (headphone) 100 - 10,000 Hz (microphone)
Data resolution	16 bit
Sampling rate	48 kHz Stereo
Operating Characteristics Rx	
Receiver gain	14dB Max.
Output power	35mW Max.
THD +Noise	<0.4% @ P_o=30mW 20~20,000 Hz
S/N @ THD <0.4%	86dB
Master volume control range	0~46.5dB attenuation
Operating Characteristics Tx	
Microphone gain	20dB Max.
Volume control range	+12dB ~ -34.5dB, 1.5dB step
Power supply	USB bus power compliant (5V, 100mA)
Dimensions	approx. 28x65x18mm (w/d/h)
Operating environment	compliant operating systems: Windows 98 SE/Windows 2000/ Windows Me/Windows XP Apple Macintosh OSX CPU: Pentium II 266 MHz or better

Main Switches & Interfaces

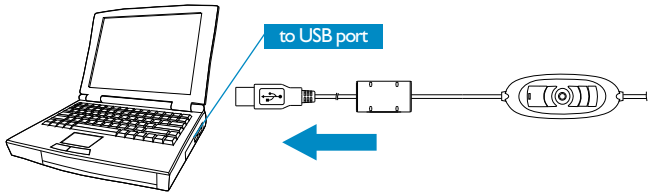


Main Switches and Interface

1. Skype-related Button 5 - Skype Program Pop-up / Switch Page
2. Skype-related Button 4 - Page Up or Up Arrow
3. 4-direction Digital Volume Control (volume adjustments and muting)
4. Skype-related Button 3 - Page Down or Down Arrow
5. Skype-related Button 2 - Hang Up
6. Skype-related Button 1 - Dial (with Multi-status LED-indicator)
7. Microphone Capsule
8. Aluminium microphone voice tube
9. Leatherette Ear Pad (including 40mm speaker chamber)
10. Adjustable voice tube holder
11. Microphone voice tube rotational pivot
12. Microphone connecting cable (with SR)
13. Extendable double-arm headband

B1. connecting the computer

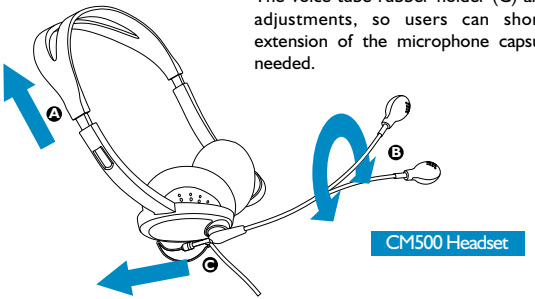
Connect the USB plug extended from the AU500 USB controller to the USB port of your notebook or desktop computer. The LED indicator will light up indicating correct connection to the computer.



B2. adjusting the headset

There are multiple points of adjustment with the CM500 headset, designed for comfort as well as accomodating different preferences. The double-arm headband (A) is extendable on both sides to fit different head sizes; and the aluminum microphone voice tube (B) is rotatable so users can place the microphone closer to their mouth if they wish. The suggested distance between a user's mouth and the microphone is 1/2 inch.

The voice tube rubber holder (C) also allows adjustments, so users can shorten the extension of the microphone capsule when needed.



B3. multi-status LED indications

The LED-indicator on the AU500 USB controller is able to display various status of the device, and the definitions are listed as below:

steady GREEN light STANDBY MODE	**flashing GREEN light** OPERATING MODE	**steady AMBER light** MUTED STANDBY	**flashing AMBER light** MUTED OPERATING
the device is in standby mode, ready to receive or transmit voice data.	the device is operating, meaning voice data is being received or transmitted.	the device is in standby mode but microphone is muted and no data is coming in or going out.	the device is operating, but microphone has been muted, the device can receive data but not transmit.

B4. under different operating system

The USB500's interactive control function is designed to pair with Microsoft® Windows OS* only. The software CD that accompanies this manual includes a direct installer that runs automatically under Windows. Aside from the USB device drivers, the CD will also install a Skype-controlling application called a "Middleware". The middleware program is only designed to work under Windows OS.

Under other OS like Apple** or Linux, the headset as well as the in-line control will still be operative, without the need to install a USB device driver. Users should still be able to control volume, speaker mute and microphone mute from the in-line control. However, because the Middleware cannot operate properly under Mac or Linux OS, the extra Skype-controlling feature will not function at all.

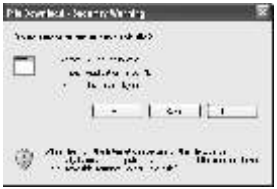
* Microsoft Windows OS refers to Windows 98 SE, Windows ME and all derivative versions of Windows 2000 & Windows XP.

** USB device driver not required for Mac OS 9 and above. For Linux driver requirements, please visit their respective websites.

C1. installing the Skype software

The installation of the Skype-controlling middleware requires the pre-installation of the Skype program. So if you have not already installed the Skype program, please download it at: http://www.skype.com/download/skype/windows/downloading.html

Click "DOWNLOAD" and follow the instructions as shown below.



Select your language for installation at the following screen, and subsequent license agreement and the installation should proceed as shown.

Your Skype™ program should launch by itself, create an account if you do not already have one, simply follow the instructions. For more details about the features and operations of the Skype software, please refer back to the Help menu with the program.

*The word "Skype" and the Skype logo are trademark of Skype Technologies S.A. The Skype website screen-crop, installation interfaces and application interfaces shown throughout this manual are all property of Skype Technologies S.A. They are shown merely as visual assistance for proper user setup of the Accutone USB500 headset.

C1. installing the driver and middleware

Start off by restarting your Windows OS. Upon restart, insert the Software CD, and the following screen will pop up. If it doesn't open up My Computer, click the CD or DVD-ROM drive. If the screen still doesn't show up, open up the drive and in the root directory double-click accutone.exe file to start the installer.

The following screen will pop-up. Please note that this installer is designed to work with more than one version of the USB headsets from Accutone.

Select the correct headset model, in this case - USB500, by clicking on the USB500 button, you should be able to see the content window showing the correct headset.

The next screen indicates the beginning of the USB500 driver installation as well as the Skype-controlling middleware application.

Press Next to continue.

Select where and which folder you want to install the files to.

Press Next to make a change, or ignore this if you are okay with the default choice.

Press Next to continue.

Click Next to continue installation.

This screen indicates the completion of the installation. With the box checked,

Click Finish to launch the middleware.

Immediately after you finish the previous installation to launch the middleware, this screen pops up.

Select Allow this program to use Skype to make sure the middleware can automatically launch Skype in the future.

C2. installing the Accusound™ software

All Accutone USB headset comes with a proprietary-designed software for Digital Audio Status Indication (DASI), called Accusound™. This program will show the current muting status of the selected USB Audio device, as well as the volume output level.

Immediately after the complete installation of the USB500 driver and middleware program, the Accusound installation will commence.

If your PC don't have Microsoft .NET installed, the program will automatically install it for you.

Click install to install Microsoft .NET

After that, if your PC already have Microsoft .NET installed, this screen will pop up.

Click next to install Accusound

Please read carefully the End-User Licence Agreement for Accusound.

Select "I accept the terms in the license agreement"

Click next to continue installation.

The next screen will show you installation details, like destination folder and user information.

Click Install to continue installation.

After a few minutes of copying files, this screen will pop up indication the successful completion of Accusound.

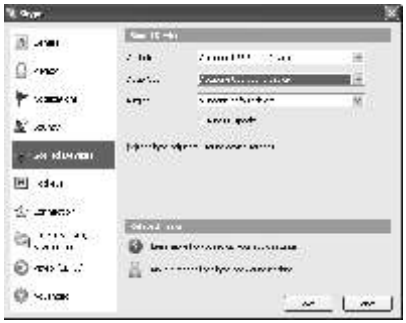
Click Finish to exit installer.

C3. setup sound devices in the Skype program

By default, the Skype program will use Windows Default Device as it's audio input and output channel. This can either mean it is using your default Sound Card, or whichever audio device you've setup in Sound Devices inside the Control Panel.

We will need to change the device to the Accutone USB headset. First, make sure you have the USB500 headset plugged in, and the driver properly installed as shown in the previous sections.

Open the Skype program, under Tools menu, select Options, and the following screen will open up.

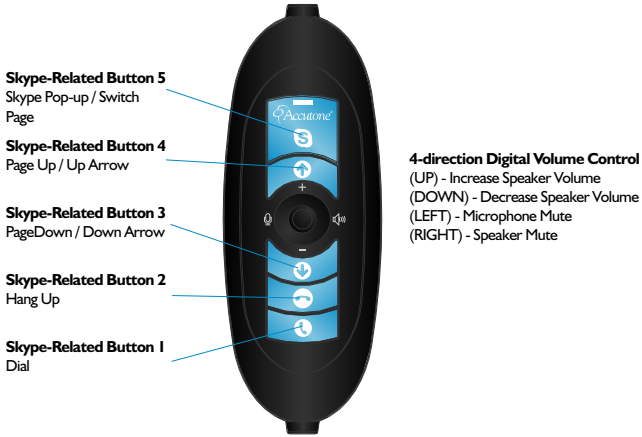


Select Sound Devices in the left panels. On the right panel, open up the Audio In drop-down menu and you should see Accutone USB Sound Device, select it. Do the same for the Audio Out selection.

Note: In some cases, the driver may read USB Audio Device, select it anyways. However you should uncheck the Let Skype Adjust My Sound Device Settings, as the Windows default driver may cause microphone cut-off during Skype talk. (Do not worry about this if you are using the Accutone USB driver.)

D1. understanding the controller interface

As shown in page 4 and 6 of this manual, the interactive controller has two sets of buttons, and a main LED indicator. Each different color or flashing mode indicates different status the headset is in. The two set of buttons are divided by their colors, the black control-stick controls basic volume and USB acoustics, the blue buttons control Skype-related functions.



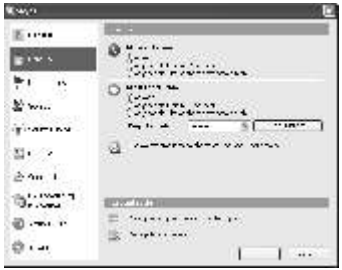
Press the Skype **Pop-Up** button **5** to turn on Skype, if the program is minimized in standby mode. By default, the Contact page turns up, use buttons **3** and **4** to **select the contacts** you wish to make the Skype-call to. When highlighted the correct contact, press button **5** to **dial** the call.
During your call, you can make adjustments to the volume by using the Volume Control in the middle.
After you've completed your call, press button **2** to **hang up**. If you wish to switch to different Skype pages like *Dial* or *History*, simply press button 1 to switch between them.

10 TROUBLESHOOTING

AU500 Skype-related feature buttons not responding
This includes any one of the blue buttons - for features like Pop-up, Dial, Hangup, Page Up, Page Down, Switch Page...etc.

- *User does not have the Skype software installed, or the program has not been turned on:* install the skype program as shown in p.14 of this manual, and double click on its icon to launch program.
- *USB500 headset not plugged in, or Accutone USB driver not installed:* check to make sure the USB500 headset is plugged into a working USB port. Accutone strongly suggests users to install the Accutone USB driver as oppose to the default Microsoft Windows USB driver. For details to install the Accutone driver, see p.9 of this manual.
- *Middleware program not installed, or install improperly*: install the middleware program as shown in section p.9 of this manual.

** If the above doesn't work, it is possible that the Skype software's external application pairing has been jammed with an non-functioning middleware application. To clean this up and re-paired the middleware program with the Skype software, do the following:



- open up Skype, go to **Tools**, and **Options**, select **Privacy** tab on the left and the above screen appears. On the bottom label **Related Tasks**, click on **manage other program's access to skype**. The above right screen pops up, if you see an entry with the name CMSKYPE.EXE, select it, and click **Remove** on the right. This will erase any broken link the middleware has with Skype
- now **reinstall the middleware program** as in section 10

10 TROUBLESHOOTING

No sound coming from the headset

- *the USB plug is not properly plugged into the jack*: check if the LED is on or replug
- *the 3.5mm headphone plug and microphone plug are not plugged in their corresponding jack*: check if the logos match
- *the headset was connected during music software being played*: close all software and restart installation
- *the audio device selected in your operating system is not correct*: go to control panel, select **Sounds and Multimedia Properties** or **Sounds and Audio Device Propeties** (XP), open **Sound Playback** tab and select **USB Audio Device** or **Accutone Audio Adaptor** in the **Preferred Device** scroll-down selection.
- *the volume control for your operating system or music software is set to mute*: uncheck mute from your system or music software.
- *the computer does not recognize the USB headset*: restart your system or re-install the USB headset driver by unplugging and re-plugging the USB plug.

Cannot record sound from the microphone

- *the microphone plug is not properly plugged in*: check connection of the headset plugs.
- *the mic muting function is on*: go to **Sound and Multimedia** (**Audio Device**) **Properties** and select **Volume** control for **Sound Recording** to check **Selected** in the **Microphone** column.
- *the audio device selected in your operating system is not correct:* refer to the above section on the same problem but open the **Sound Recording** tab instead.

Other problems

- *I'm using Windows 98 or 98SE, and the unit just doesn't work properly no matter how many times I re-install the drivers:* pc running Windows 98SE with AMD processor at 350MHz or faster, and pc that uses VIA Technologies USB Controller will require a Microsoft USB Update Patch file, go to www.accutone.com.hk website, under "more information" in the AU500 adaptor section, click "Microsoft Windows 98 Driver Update" and follow the instructions.
- *headset seize to function after unplug and then re-plug to USB port:* in some PC, the audio driver doesn't reset automatically; go to Control Panel and reselect the proper Sound Playback and Sound Recording driver under Audio devices.

* For problems not listed in the above section, or more detailed instructions to various troubleshooting, please refer back to **FAQ:troubleshooting** section in our website at http://www.accutone.com

11 PRECAUTIONS ON SAFETY

- Listening with the headset at high volume may damage your hearing.
- Adjusting the volume for microphone or headphone too high may cause squealing (feedback sound) and can damage your hearing.
- Do not use while driving and cycling.
- Place product far away from water, fire, extended exposure of direct sunlight or magnetic field, and places of excessive dust, moist, rain, shock or electromagnetic radiation.
- Do not drop your headset or subject it to external shock which may cause malfunction.
- Do not disassemble or attempt to open up the casing of either adaptor or headset.
- Whenever unplugging the headset or the adaptor, apply force to the plug part only. Jerking the cord instead of the plug may cause damage to the product.
- Do not use any liquid substance to clean the casing of the product.

12 SAFETY STANDARDS - CE MARK

This product had been subject to testing requirement for the CE mark, and has been approved to claim the CE mark for EMC standards (EN55022:09.98+A1:10.00+A2:01.03, EN55024:09.98+A1:10.01+A2:01.03). The validity of the CE marking is restricted to only those countries when it is legally enforced, mainly in the countries of the European Economic Area.

You are cautioned that any change or modification not expressly approved in this manual could void your authority to operate this equipment.

13 TRADEMARKS AND OWNERSHIP

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* Apple Computer Inc. has intellectual property rights over "Apple", "Macintosh" and "OSX".
* In this manual, Microsoft® Windows® XP Home Edition and Microsoft® Windows® XP Professional Edition are referred to as Windows XP, whereas Microsoft® 2000 Professional Edition is referred to as Windows 2000, Microsoft® Millennium Edition is referred to as Windows Me, and Microsoft® Windows® 98 Second Edition is referred to as Windows 98 SE.
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